

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



United States Department of Agriculture  
Bureau of Biological Survey

Wildlife Research and Management Leaflet BS-100

Washington, D. C.

\*

January 1938

ANNOTATED LIST AND INDEX OF LEAFLETS BS-1 TO BS-100

By W. L. McAtee, Technical Adviser and Research Specialist  
Office of the Chief

Contents

	Page :		Page
Introduction . . . . .	1	: Author index . . . . .	14
Annotated list . . . . .	2	: Subject index. . . . .	16

Introduction

This list and index of leaflets in the "BS" series has been prepared for the benefit of employees and cooperators of the Biological Survey and as a guide for correspondents interested in publications of the Bureau. Requests for the entire series of these leaflets are frequently received, but it is probable that, aside from the requisitions of libraries, few are justified. The series includes leaflets so diverse in character that all will not be of use to every individual. The list should be carefully scanned, therefore, and requests confined to the numbers actually needed.

The title "Wildlife Research and Management Leaflet" was selected to include mimeographed information on major lines of the Bureau's activities dealing with wild animals and birds, but the series has come to include a great variety of other material to which the Survey desires to give prompt or temporary publicity in connection with correspondence. Deviations of the series from the strictly wildlife field are indicated by the titles on domesticated rabbits, of which there are 14 in this first hundred; by 4 leaflets pertaining to cage birds, guinea pigs, pet squirrels, and chameleons; and by 12 dealing with the raising of fur animals in confinement. The need of specifying which titles are desired is thus amply evident.

### Annotated List

- BS-1. Winter food of ruffed grouse in New York. By Leon H. Kelso. 3 pp., 1 table, January 1935.  
Report on analyses of 80 stomach and crop contents, with special attention to the vegetable food.
- BS-2. Aids for bird students. Prepared in the Division of Wildlife Research. 8 pp., January 1935. (Supersedes Leaflet Bi-787.)  
Among publications on birds, this leaflet cites a partial list of those of the Department of Agriculture; mimeographed leaflets of the Biological Survey; popular books for the identification of North American birds; general works on birds; some regional publications on birds; and selected books on special phases of bird study. Addresses are given of American ornithological societies and magazines, and of sources of leaflets, colored pictures, charts, bird lectures, lantern slides, motion pictures, field glasses or prism binoculars, telescopes, and taxidermists' and general naturalists' supplies.
- BS-3. The present situation regarding eelgrass (Zostera marina). By Clarence Cottam. 7 pp., February 1935. (Out of print. See BS-94.)  
History and extent of eelgrass disappearance; cause of the malady; effects of disappearance, especially on brant; past periods of scarcity; present conditions in the Atlantic States, Canada, and Europe.
- BS-4. Available publications of the Bureau of Biological Survey. Compiled in the Division of Public Relations. Revised from time to time, latest revision, 7 pp., December 1937. (Supersedes Leaflet Bi-161.)  
Farmers' Bulletins; Leaflets; Yearbook reprints; Technical Bulletins; North American Faunas; Circulars; Miscellaneous Publications; mimeographed leaflets.
- BS-5. Tularemia, an animal-borne disease. By W. B. Bell and J. E. Shillinger. 3 pp., April 1935.  
Nature and history of the disease; symptoms in man; symptoms in wild rabbits; other animals known to be susceptible; protective measures, including quarantine.
- BS-6. Publications on cage birds. Prepared in the Section of Food Habits, Division of Wildlife Research. 9 pp., April 1935. (Supersedes Leaflet Bi-173.)  
References to Farmers' Bulletin 1327, "Canaries: Their care and management", and to American and foreign books and periodicals, giving addresses of publishers.
- BS-7. Instructions for controlling bats. Prepared in the Section of Predator and Rodent Control, Division of Game Management. 1 p., April 1935. (Superseded by U. S. Dept., Agr. Leaflet 109, September 1935.)  
Repelling, excluding, fumigating.

- BS-8. Publications on attracting birds. Prepared in the Section of Food Habits, Division of Wildlife Research. 4 pp., April 1935. (Supersedes Leaflet Bi-159.)
- Publications of the Department of Agriculture, of Audubon Societies, and of other agencies, with addresses.
- BS-9. Infectious diseases as a cause of loss in wildlife. By J. E. Shillinger. 4 pp., May 1935.
- Review of the subject and list of 6 pertinent publications.
- BS-10. The possibility of secondary poisoning from thallium used in the control of rodents. By F. E. Garlough. 2 pp., May 1935.
- Lethal doses of thallium for certain mammals and birds; possibility of secondary poisoning in man.
- BS-11. Birds aid blueberry and cranberry growers. By Phoebe Knappen. 4 pp., June 1935.
- Using birds in the control of berry insects; cranberry and blueberry pests among caterpillars, gall midges and gall gnats, beetles, sawflies, bugs, katydids, crickets, and grasshoppers, and their bird enemies; summary.
- BS-12. The present plight of the Jackson Hole elk. By H. P. Sheldon, Olaus J. Murie, and W. E. Crouch. 4 pp., 1 map, July 1935.
- Migrations of this elk herd, a last remnant of the old-time game treks; Jackson Hole, their winter home, should be classed as a recreational rather than agricultural area; the elk problem is lack of winter range; winter feeding degrades the elk; temporary measures are costly; and permanent solution requires acquisition of fully adequate range.
- BS-13. Protecting grain crops from damage by wild fowl. By E. R. Kalmbach. 7 pp., August 1935.
- Nature of complaints; severity of damage both by geese and by ducks; obligations of the farmer in handling crops and in resorting only to legal methods of control; obligations of the Federal Government as the agency protecting the birds; suggestions for crop protection, including the use of firearms, herding geese, and employment of fireworks, lights, and flash guns.
- BS-14. Planting for wildlife in the corn belt. By W. L. McAtee. 2 pp., August 1935. (Supersedes Leaflet Bi-1326.)
- Using some of the land taken out of corn production for planting to improve cover and food resources for wildlife.
- BS-15. Planting for wildlife in the cotton belt. By W. L. McAtee. 2 pp., August 1935. (Supersedes Leaflet Bi-1327.)
- Using some of the land taken out of cotton production for planting to improve cover and food resources for wildlife.

- BS-16. Bird refuges and big-game preserves administered by the Bureau of Biological Survey. Compiled in the Divisions of Game Management and Migratory Waterfowl. Revised from time to time, latest revision, 8 pp., 1 map, April 1936. (Supersedes Leaflet Bi-1226a.) (Out of print.)  
List by States and Territories of the refuges and preserves under administration, giving the year of establishment, acreage, and the names of the species or groups of wildlife chiefly protected. Map showing location of the reservations in the United States.
- BS-17. Wildlife of the Atlantic coast salt marshes. By W. L. McAtee. 22 pp., September 1935.  
Prepared for educational use in work camps; includes sections on zones of salt-marsh plants; plants of the zones and their value to wildlife; birds, both the more and the less characteristic species; and other wildlife; together with a brief essay on conservation.
- BS-18. Federal regulations on hunting waterfowl explained. 4 pp., October 1935. (Out of print.)  
Explanations as to the duck stamp; Federal open seasons and State laws; and regulations relative to baiting; prohibition of the use of live decoys; possession limits; autoloading and repeating shotguns; sink boxes, boats, and blinds. Applies specifically to the 1935 season.
- BS-19. Plants valuable for wildlife utilization and for erosion control. By W. L. McAtee. 11 pp., 8 tables, October 1935. (Superseded by U.S. Dept. Agr. Circular 412, October 1936.)  
Utilization of plants by wildlife; crop plants and their use in erosion control, with lists of leading species; uncultivated plants useful for wildlife and erosion control, with lists of the genera known to be most useful in providing cover, browse, herbage, mast, fruit, and seed; consolidated list of plants that have been recommended for erosion control, showing their value for the various categories of wildlife utilization.
- BS-20. What shall we feed our pelters? By Charles F. Bassett. 7 pp., 3 tables, 2 figures (graphs), November 1935.  
Foxes selected for the experiments; explanation of feeds used as substitutes for raw meat; schedule of feedings; examination of fur as a test of results; the last expressed in text, table, and graphs.
- BS-21. Feed cost of producing young rabbits to weaning age. By Chas. E. Kellogg. 3 pp., 1 table, October 1935.  
Report on tests at the Fontana, Calif., Rabbit Experiment Station.
- BS-22. Feed requirements in raising weaned rabbits to a weight of 6 pounds. By Chas. E. Kellogg. 4 pp., 1 table, October 1935.  
Continuation of report embodied in the preceding leaflet, including cost.
- BS-23. Abstract of fur laws, 1935-36. By Frank G. Grimes. 29 pp., November 1935. (Out of print, see BS-97.)  
By States and Territories, also for the Canadian Provinces.
- BS-24. Bounties paid by States. By Frank G. Grimes. 4 pp., November 1935. (Out of print.)  
Itemized by States.



- BS-25. Fur resources--the stepchild of conservation. By Frank G. Ashbrook. 4 pp., December 1935.  
Neglect of a valuable resource; recommendation that the fur trade cooperate to insure the preservation of fur resources.
- BS-26. Directions for poisoning pinon jays. Prepared in the Section of Food Habits, Division of Wildlife Research. 2 pp., November 1935. (Supersedes Leaflet Bi-867.)  
Damage done by the bird, and control suggestions, including preparation and distribution of poisoned bait.
- BS-27. A cage trap useful in the control of white-necked ravens. By Shaler E. Aldous. 5 pp., 1 fig., January 1936.  
Range, identification, and economic relations of the white-necked raven; description, bill of materials, and illustrations of the trap; its operation and efficiency.
- BS-28. Feeding schedule for rabbits. Prepared in the Section of Fur Resources, Division of Wildlife Research. 1 p., 1 table, December 1935. (Supersedes Leaflet Bi-1317.)  
Maintenance rations for mature animals; special rations for does that fail to kindle and for those suckling young. The table gives a sample feeding schedule for a doe and litter.
- BS-29. Directions for preservation and care of material collected for food habits studies. Prepared in the Section of Food Habits, Division of Wildlife Research. 5 pp., 3 figs., December 1935. (Supersedes Leaflet Bi-402 and Bi-1145.)  
Directions for collecting stomachs and recording data; notes on preservatives and materials needed and their use; preservation of unidentified material; collection of pellets, droppings, and other material; and shipping. Illustrations of tags and schedules for recording data.
- BS-30. Economic ornithology and the correlation of laboratory and field methods. By Clarence Cottam. 13 pp., 1 fig., January 1936.  
The comparative utility of field and laboratory research and the desirability of combining them; description of laboratory methods of stomach examination; bibliography of 9 titles. The figure illustrates a laboratory table and equipment for studying food-habit material.
- BS-31. Average weight of rabbits at weaning age. By Chas. E. Kellogg. 5 pp., 3 figs., January 1936.  
Distribution by weight of 1,903 rabbits weaned at 8 weeks; weights of those weaned during different months; sizes of litters embracing these animals.
- BS-32. Raising badgers in captivity. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., January 1936. (Supersedes Leaflet Bi-1059.)  
General description of the badger and its fur; of suitable pens and dens; directions for feeding; and notes on breeding.

- BS-33. Forestry and game management. By Herman H. Chapman. 4 pp., January-February 1936.  
(Reprinted from Journal of Forestry 34 (2): 104-106, February 1936.)  
Coordination of game management with other uses of forests is a matter of proper land use, and a function of the forester.
- BS-34. Raising raccoons. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., January 1936. (Supersedes Leaflet Bi-216.)  
Selecting a ranch site; preparing pens and dens; feeding; breeding; also general notes on management.
- BS-35. Raising muskrats. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., February 1936.  
Pen raising; fencing marsh areas; breeding; definition of prime pelts; further suggestions. List of 6 publications on muskrats, the addresses of their publishers, and prices.
- BS-36. Publications on fur and fur animals. Compiled in the Section of Fur Resources, Division of Wildlife Research. 2 pp., January 1936.  
Revised from time to time, latest revision, 4 pp., August 1937.  
(Supersedes Leaflets Bi-336 and Bi-1024.)  
Classified list of printed and mimeographed publications of the Department of Agriculture on fur animals, domestic rabbits, white mice and rats, and guinea pigs.
- BS-37. The correlation of forestry and wildlife management. By Ira N. Gabrielson. 8 pp., February 1936. (Reprinted from Journal of Forestry, 34 (2): 98-103, February 1936.)  
Suggested modifications of forestry practice for the benefit of wildlife.
- BS-38. Cooperative research in wildlife management--a summary of the project to February 15, 1936. By I. T. Bode. 16 pp., 1 table, February 1936.  
Statement as to the cooperating agencies and their contributions; selection of cooperating States; tabulation of the projects, giving name of State, location of station, and the region served; administration of program; project leaders and their addresses; objectives; types of questions needing answer; programs of work by States.
- BS-39. Report on the Arnett, Oklahoma, Experimental Quail and Prairie Chicken Management Project. By Verne Davison, abridged by W. L. McAtee. 6 pp., March 1936.  
A cooperative study of the lesser prairie chicken and bobwhite; site; life history findings; management studies, especially on trapping, feed patches, use of fire, water requirements, and predators; miscellaneous comment on introduction of Mexican quail, misconceptions of hunters, and free hunting.
- BS-40. An automatic drinking fountain for minks. By Charles F. Bassett. 3 pp., 5 figs., March 1936.  
Description and illustrations of a home-made device for providing an adequate supply of clean, fresh drinking water.



- BS-41. Fruits attractive to birds--Northwestern States, Region No. 1. By W. L. McAtee. 14 pp., 1 fig., 10 tables, April 1936.  
Region includes Washington, Oregon, and Idaho; for notes on contents of leaflet, see under BS-50.
- BS-42. Fruits attractive to birds--Rocky Mountain States, Region No. 2. By W. L. McAtee. 12 pp., 1 fig., 8 tables, April 1936.  
Region includes Montana, Wyoming, and Colorado; for notes on content of leaflet, see under BS-50.
- BS-43. Fruits attractive to birds--Northern Plains States, Region No. 3. By W. L. McAtee. 13 pp., 1 fig., 7 tables, April 1936.  
Region includes North Dakota, South Dakota, Nebraska, and Kansas; for notes on contents of leaflet, see under BS-50.
- BS-44. Fruits attractive to birds--Northeastern States, Region No. 4. By W. L. McAtee. 26 pp., 1 fig., 18 tables, April 1936.  
Region includes States from Missouri north to Minnesota and east to Virginia and Maine; for notes on contents of leaflet, see under BS-50.
- BS-45. Fruits attractive to birds--California, Region No. 5. By W. L. McAtee. 14 pp., 1 fig., 5 tables, April 1936.  
Region includes only one State--California; for notes on contents of leaflet, see under BS-50.
- BS-46. Fruits attractive to birds--Great Basin States, Region No. 6. By W. L. McAtee. 9 pp., 1 fig., 4 tables, April 1936.  
Region includes Utah and Nevada; for notes on contents of leaflet, see under BS-50.
- BS-47. Fruits attractive to birds--Southwestern States, Region No. 7. By W. L. McAtee. 10 pp., 1 fig., 5 tables, April 1936.  
Region includes Arizona and New Mexico; for notes on contents of leaflet, see under BS-50.
- BS-48. Fruits attractive to birds--Southern Plains States, Region No. 8. By W. L. McAtee. 12 pp., 1 fig., 7 tables, April 1936.  
Region includes Texas and Oklahoma; for notes on contents of leaflet, see under BS-50.
- BS-49. Fruits attractive to birds--Southeastern States, Region No. 9. By W. L. McAtee. 12 pp., 1 fig., 3 tables, April 1936.  
Region includes States from Arkansas and Louisiana east to North Carolina and Georgia; for notes on contents of leaflet, see under BS-50.
- BS-50. Fruits attractive to birds--Florida, Region No. 10. By W. L. McAtee. 13 pp., 2 figs., 4 tables, April 1936.  
Region includes only one State--Florida; for notes on contents of leaflet, see following paragraph.

Leaflets BS-41 to BS-50 each contain a map showing the region involved; an introductory statement descriptive of the region; a table listing the genera of fleshy fruits that are known to be most attrac-

tive to birds, giving the number of species known to feed upon them, and the names of desirable kinds of birds most fond of each; varying numbers of tables listing both native and extralimital species of fruits suitable for the region, often with notes on their bearing seasons; and a list of the more important publications of interest in connection with the selection and planting of fleshy-fruit bearers.

- BS-51. Local control of magpies. By E. R. Kalmbach. 8 pp., 2 figs., April 1936.  
Economic status of the magpie; methods of control, including destroying nests and young, trapping, and poisoning. The figures illustrate a trap and a suet stick and suet block. (Supersedes Leaflet Bi-729.)
- BS-52. Raising guinea pigs. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., April 1936. (Supersedes Leaflet Bi-1291.)  
Housing; feeding; breeding; and management.
- BS-53. Birdbanding. Prepared in the Section of Distribution and Migration of Birds, Division of Wildlife Research. 5 pp., April 1936.  
Brief history of bird banding; authorization and direction of the work; qualifications for cooperation; discussion of the risk of injuries to birds in banding operations; description of bands; brief notes on traps; and statement of the value of the work.
- BS-54. Rodent control aided by emergency conservation work. By Stanley P. Young. May 1936; revised edition, 30 pp., 57 photos, December 1936.  
Need for rodent control; Federal, State, and local cooperation; training of E. C. W. crews; timeliness of emergency aid; forest and forage protection; aid in erosion control; examples of benefits derived; safeguarding harmless species; control work illustrated.
- BS-55. Pertinent facts on the Angora wool rabbit. Prepared in the Section of Fur Resources, Division of Wildlife Research. 1 p., May 1936.  
(Supersedes Leaflet Bi-1292.)  
Special considerations relating to wool production and marketing.
- BS-56. Periodicals on rabbits and cavyes. Prepared in the Section of Fur Resources, Division of Wildlife Research. 1 p., May 1936.  
Revised from time to time, latest revision, 2 pp., December 1937.  
(Supersedes Leaflet Bi-1136.)  
Names, addresses, and subscription rates.
- BS-57. Marking wild animals for identification. By Frank G. Ashbrook. 3 pp., 1 fig., May 1936.  
Tattooing and tagging ears; toe clipping; addresses of manufacturers of tattooing instruments and ear tags.
- BS-58. Classification and price trends of silver fox skins. By Chas. E. Kellogg. 12 pp., 4 figs., 3 tables, June 1936.  
General trends in prices; distribution of marketed pelts by classes according to degree of silvering; price trends in the United States and Great Britain, 1932-1936.
- BS-59. Directions for organizing and conducting rabbit drives. Prepared in the Section of Predator and Rodent Control, Division of Game Management. 2 pp., 1 fig., June 1936. (Supersedes Leaflet Bi-739.)  
Location and construction of corral and wings (diagrams); drive organization and advance.

- BS-60. Feeding the weaned minks. By Charles F. Bassett. 4 pp., 2 tables, 1 fig. (graph), June 1936.  
Report on experimental feeding; preliminary management of the animals; rations fed; feeding; results; conclusions. The tables give details of the rations, and the graph shows the average weight of the four lots of animals by fortnightly periods.
- BS-61. Sullys Hill National Game Preserve, North Dakota. By Clara Ruth. 5 pp., 6 photos, July 1936.  
Location; history as a Federal reservation; the primary purpose is education; the area is rich in historical interest; list of other Federal big-game ranges and preserves.
- BS-62. Suggestions on trapping coyotes and wolves in Alaska. By Harlan H. Gubser. 6 pp., August 1936. (Supersedes Leaflet Bi-1152.)  
Need for control; equipment for trapping; preparing scents for lures; setting traps; ten "don'ts" for trappers; den hunting.
- BS-63. Raising martens in captivity. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., August 1936. (Supersedes Leaflet Bi-103.)  
Traits of martens; food in the wild and in captivity; desirable qualities and construction of pens and nest boxes; notes on breeding and diseases; and general instructions.
- BS-64. Protecting crops from damage by horned larks in California. By Johnson A. Neff. 10 pp., 2 figs., September 1936.  
Distribution and habits of horned larks; crops damaged; nature, season, and severity of damage; methods of preventing damage; description and estimate of costs of continuous string flagging (the figures pertain to this procedure).
- BS-65. Relative weights of young rabbits and does during the suckling period. By Chas. E. Kellogg. 5 pp., 1 fig. (graph), October 1936.  
Average weekly weights of young New Zealand rabbits up to weaning time (8 weeks); discussion of various factors in the test.
- BS-66. Polygamous mating of foxes. By Chas. E. Kellogg. 4 pp., October 1936.  
Advantages of polygamous breeding; report on a year's experimentation at the U. S. Fur Animal Experiment Station; cautions.
- BS-67. Wildlife technology. By W. L. McAtee. 5 pp., October 1936.  
Origin and present status of wildlife technology; identity, range, and migration techniques; food and cover techniques; wildlife technology in conservation.
- BS-68. Abstract of fur laws, 1936-37. By Frank G. Grimes. 32 pp., November 1936. (Out of print, see BS-97.)  
Summaries by States, Territories, and Canadian Provinces.
- BS-69. Fur farming in perspective. By Frank G. Ashbrook. 4 pp., 1 table, October 1936.  
Development of silver fox farming, 1922-34, in the United States and Canada; notes on the industry in other countries; comment and recommendations.

- BS-70. Poisonous snakes of the United States. Prepared in the Section of Food Habits, Division of Wildlife Research. 19 pp., November 1936. (Supersedes Leaflet Bi-571.)
- Number and kinds of poisonous snakes in the United States; key to the principal species; names and ranges of rattlesnakes; poison apparatus of venomous snakes; characteristics of the venoms; mortality resulting from snake bite; treatment for bites of North American poisonous snakes; notes on rattles, young, and food habits. Bibliography of 45 titles.
- BS-71. Wildlife in land planning. By W. L. McAtee. 6 pp., November 1936.
- Value of wildlife; wildlife protection; unfavorable alteration of environment; restoration of environment; allotment of land to wildlife; management necessary; management in relation to land use; value of wildlife management.
- BS-72. Check-list of marsh and aquatic plants of the United States. By Neil Hotchkiss. 27 pp., December 1936.
- References to manuals and monographs used in compilation of the list; the names recommended for use are presented in systematic order.
- BS-73. Inheritance of "woolly" in rabbits. By A. W. Bellamy. 4 pp., 1 fig. (diagrams), December 1936. (Supersedes Leaflet Bi-1171.)
- The occurrence of woolly hair in meat breeds a defect; explanation of the genetics of the character, and suggestions for its elimination.
- BS-74. Nail-keg nest box. By George S. Templeton. 2 pp., 4 figs., December 1936.
- For domestic rabbits; description; illustrations; use.
- BS-75. Raising otters in captivity. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., December 1936. (Supersedes Leaflet Bi-152.)
- Traits of otters; food in the wild and in captivity; notes on breeding; enclosures; dens.
- BS-76. Some suggestions for bird field study. By May Thacher Cooke. 6 pp., December 1936. (Supersedes Leaflet Bi-922.)
- Popularity of the study; availability of aids; time to begin; equipment; where and when to go; field identifications; note keeping; significance of the study; organizations; list of helpful books and pictures; addresses of their publishers, and prices.
- BS-77. The wild turkey on the Missouri Ozark Range. By Harold L. Blakey. 32 pp., 2 pls., 1 table, January 1937.
- The Ozark Range, types of turkeys there; conservation efforts; life history of the birds; factors limiting abundance; field management; future conservation problems; bibliography of 6 titles. The figures delineate former and present ranges of wild turkeys in the United States and details of the Ozark Range, and show the relation of forest fires to the season of turkey reproduction on Clark National Forest, Mo. The table lists vegetable foods, giving the parts of the plants consumed and the season during which used.

- BS-78. Directions for destroying house mice. Prepared in the Section of Predator and Rodent Control, Division of Game Management. 2 pp., January 1937. (Supersedes Leaflet Bi-913.)  
Trapping; poisoning; repelling; cats as mousers.
- BS-79. Vent diseases of domestic rabbits. By F. D. McKenney and J. E. Shillinger. 4 pp., January 1937.  
Symptoms and treatment of spirochetosis and urine burn; similar notes on miscellaneous infections.
- BS-80. Feeding and caring for squirrels. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., January 1937. (Supersedes Leaflet Bi-526.)  
Food in the wild and in captivity; description of suitable cages and nests; directions for care and sanitation.
- BS-81. Suggestions for combating starling roosts. By E. R. Kalmbach. 17 pp., 1 pl., February 1937.  
Introduction and present range of the starling; economics of the bird; nature and significance of winter roosts; the objectionable roost; avoidance, prevention, and frightening measures; reduction of numbers by shooting, trapping, gassing, and poisoning; literature cited (5 titles). The plate illustrates devices for screening roosting places, eliminating perches, and shaking tree roosts; also a starling trap.
- BS-82. Mink raising. Prepared in the Section of Fur Resources, Division of Wildlife Research. 8 pp., January 1937. (Supersedes Leaflet Bi-106.)  
History of mink raising and outlook for the business; description of suitable pens, nest boxes, and other equipment; characteristics of good breeding stock; food; feeding; mating; period of gestation; number of young; rapidity of growth; hints on management, sanitation, and animals to be pelted; methods of killing and pelting; list of periodicals useful to mink farmers, with the addresses of publishers and subscription prices.
- BS-83. Birds in relation to fishes. By Clarence Cottam and F. M. Uhler. 16 pp., May 1937. (Supersedes Leaflet Bi-1228.)  
General discussion of fish-eating birds, the causes of fish depletion, and fish and bird relationships; account by groups of the food of birds condemned by anglers; and general discussion of preventive and control measures, including screening and wiring ponds, trapping, frightening, and shooting.
- BS-84. Food of the scaled quail. (Preliminary report.) By Leon H. Kelso. 9 pp., 2 tables, March 1937.  
Appearance, range, and environment; food of adults; food of young; comparison of food with that of other quails; summary; literature cited (12 titles). The tables give monthly and yearly percentages of the principal food items of the scaled quail and summary of the food tendencies of four American species, namely, the scaled quail, bobwhite, Gambel's quail, and California quail.



BS-85. Self-feeding system for market rabbits. By George S. Templeton. 9 pp., 3 pls., March 1937.

Report on experiments to devise a feeder allowing the animals to regulate their own diet; experience as to feeding grains, milled products, and protein supplements; number of kinds of feeds necessary for ration; results with fryer and roaster rabbits; precautions; summary of advantages. Construction of self feeder described and illustrated.

BS-86. Sanitation in domestic rabbitries. By Frank D. McKenney. 4 pp., April 1937.

General procedure; cleaning equipment; choosing a disinfectant; prevention and control of infectious diseases.

BS-87. Some accomplishments of the cooperative research units, a summary to January 31, 1937. By Hartley H. T. Jackson. 10 pp., April 1937.

List of the units, location, date of establishment, and name of leader; summary of progress for each of the 9 units.

BS-88. The waterfowl situation: 1936-37. Prepared in the Section of Distribution and Migration of Birds, Division of Wildlife Research. 14 pp., 1 graph, 3 maps, May 1937.

The 1936 breeding-ground survey; breeding grounds in the United States; the 1936 fall migration; investigations in Mexico; the January 1937 inventory; precipitation in the northern Great Plains region (graph) as related to duck breeding; conclusions. The maps illustrate routes of field parties and coverage of the inventory.

BS-89. Infectious myxomatosis of domestic rabbits (mosquito disease; big-head disease). By F. D. McKenney and J. E. Shillinger. 2 pp., May 1937.

Occurrence and common names; transmission; symptoms and mortality; post-mortem evidences of the disease; prevention and control.

BS-90. Hemorrhagic septicemia of domestic rabbits: Contagious nasal catarrh (snuffles), sub-cutaneous abscesses (boils) and other forms. By F. D. McKenney and J. E. Shillinger. 5 pp., May 1937.

Occurrence and forms of the disease; manifestations and symptoms; prevention and control.

BS-91. Research studies in the control of destructive mammals. By F. E. Carlough. 12 pp., 6 photos, May 1937.

Conditions favoring pest increase; meadow mouse control; combating pocket gophers and other rodents; studies for suppressing coyotes; methods employed; development of selective poisons; protecting innocent species.

BS-92. The American chameleon and its care. Prepared in the Section of Food Habits, Division of Wildlife Research. 4 pp., May 1937. (Supersedes Leaflet Bi-565.)

Range of the chameleon; description; activity; food and breeding habits; care. Directions for rearing mealworms and cockroaches as a food supply.

- BS-93. The controlled hunting areas and the pheasant refuge-management system in Northwestern Ohio. By Lawrence E. Hicks. 10 pp., 1 map, April 1937.  
Production of pheasants by natural propagation at low cost; stocking the surplus birds on refuges in hunting areas; the Ohio pheasant-refuge management system; the Wood County controlled-hunting system; conclusions. References to 21 related publications. The map shows hunting grounds and closed areas in a single township.
- BS-94. Status of eelgrass (Zostera marina) on the North Atlantic Coast, January 1937. By John J. Lynch and Clarence Cottam. 15 pp., 1 table, July 1937. (Supplements Leaflet BS-3.)  
Review of the decline of eelgrass in 1931 and of the subsequent history of the plant; summary of conditions by States to date of publication; report on experimental plantings.
- BS-95. Preserves and ranges maintained for buffalo and other big game. By Clara Ruth. 20 pp., 12 figs., September 1937.  
Reasons for establishment of these reservations; history and description of 10 in the United States and 1 in Alaska. Notes on protection of big brown bears in Alaska, on buffalo herds other than those of Biological Survey preserves, and on improvement and development of refuges. The leaflet also includes a list of publications on big game-animals.
- BS-96. Blackbirds and the rice crop on the Gulf coast. By E. R. Kalmbach. 4 pp., November 1937. (Supersedes Leaflet Bi-899.)  
Extent of damage; area affected; legal status of the birds and their habits and control.
- BS-97. Abstract of fur laws, 1937-38. By Frank G. Grimes. 31 pp., October 1937. Summaries by States, Territories, and Canadian Provinces.
- BS-98. Colleges and universities offering courses in wildlife management, 1937-38. Prepared in the Section of Wildlife Surveys, Division of Wildlife Research. 8 pp., October 1937.  
Recent developments in education for wildlife management, with list of courses and of institutions offering them; suggestions as to training needed for wildlife research and administration.
- BS-99. Disease as a factor in game fluctuation. By J. E. Shillinger. 3 pp., December 1937.  
Notes on cycles and their periods; results of cooperative study of causes; suggested remedial measures.
- BS-100. Annotated list and index of Leaflets BS-1 to BS-100. By W. L. McAtee. 20 pp., January 1938.  
Nature of the series; brief abstract of each leaflet; author and subject indexes.

## Author Index

- Aldous, Shaler E., 27  
Cage trap for white-necked  
ravens, 27
- Ashbrook, Frank G., 25, 57, 69  
Fur farming, 69  
Fur resources, 25  
Marking wild animals, 57
- Bassett, Charles F., 20, 40, 60  
Drinking fountain for minks, 40  
Feeding pelters, 20  
Feeding weaned minks, 60
- Bell, W. B., and Shillinger,  
J. E., 5  
Tularemia, 5
- Bellamy, A. W., 73  
Inheritance of "woolly" in  
rabbits, 73
- Blakey, Harold L., 77  
Wild turkey in Missouri, 77
- Bode, I. T., 38  
Cooperative research in wild-  
life management, 38
- Chapman, Herman H., 33  
Forestry and game manage-  
ment, 33
- Cooke, May Thacher, 76  
Bird field study, 76
- Cottam, Clarence, 3, 30  
Correlation of laboratory and  
field methods in economic  
ornithology, 30  
Status of eelgrass, 1935, 3  
See also Lynch, John J., and ----
- and Uhler, F. M., 83  
Birds in relation to fishes, 83
- Crouch, W. E. See Sheldon, H. P  
and -----
- Davison, Verne, 39  
Oklahoma quail and prairie  
chicken project (abridged  
by W. L. McAtee), 39
- Gabrielson, Ira N., 37  
Forestry and wildlife manage-  
ment, 37
- Garlough, F. E., 10, 91  
Research in control methods, 91  
Secondary poisoning from thal-  
lium, 10
- Grimes, Frank G., 23, 24, 68, 97  
Bounties paid by States, 24  
Fur laws, 1935-36, 23  
Fur laws, 1936-37, 68  
Fur laws, 1937-38, 97
- Gubser, Harlan H., 62  
Trapping coyotes and wolves in  
Alaska, 62
- Hicks, Lawrence E., 93  
Controlled hunting areas, Ohio,  
93
- Hotchkiss, Neil, 72  
Marsh and aquatic plants, 72
- Jackson, Hartley H. T., 87  
Cooperative wildlife research  
units, 87
- Kalmbach, E. R., 13, 51, 81, 96  
Blackbirds and rice on the  
Gulf coast, 96  
Combating starling roosts, 81  
Magpie control, 51  
Protecting grain crops from  
wild fowl, 13

- Kellogg, Chas. E., 21, 22, 31, 58, 65, 66  
 Feed cost, rabbits before weaning, 21  
 Feed requirements, weaned rabbits, 22  
 Polygamous mating of foxes, 66  
 Price trends, silver fox skins, 58  
 Weight of rabbit does and young, 65  
 Weight of rabbits at weaning, 31
- Kelso, Leon H., 1, 84  
 Food of scaled quail, 84  
 Winter food, ruffed grouse, New York, 1
- Knappen, Phoebe, 11  
 Birds aid berry growers, 11
- Lynch, John J., and Cottam, Clarence, 94  
 Status of eelgrass, 1936, 94
- McAtee, W. L., 14, 15, 17, 19, 41 to 50, 67, 71, 100  
 Fruits attractive to birds, 41 to 50  
 California, 45  
 Florida, 50  
 Great Basin States, 46  
 Northeastern States, 44  
 Northern Plains States, 43  
 Northwestern States, 41  
 Rocky Mountain States, 42  
 Southeastern States, 49  
 Southern Plains States, 48  
 Southwestern States, 47  
 List and index of leaflets 1 to 100, 100  
 Planting for wildlife in corn belt, 14  
 Planting for wildlife in cotton belt, 15  
 Plants for wildlife utilization and erosion control, 19  
 Wildlife in land planning, 71  
 Wildlife of salt marshes, 17
- McAtee, W. L.--Continued  
 Wildlife technology, 67  
See also Davison, Verne, and -----
- McKenney, F. D., 86  
 Sanitation in domestic rabbitries, 86
- and Shillinger, J. E., 79, 89, 90  
 Hemorrhagic septicemia of domestic rabbits, 90  
 Myxomatosis of domestic rabbits, 89  
 Vent diseases of domestic rabbits, 79
- Murie, Olaus J. See Sheldon, H. P., and -----
- Neff, Johnson A., 64  
 Protecting crops from horned larks, 64
- Ruth, Clara, 61, 95  
 Preserves for big game, 95  
 Sullys Hill Game Preserve, 61
- Sheldon, H. P.; Murie, Olaus J.; and Crouch, W. E., 12  
 Jackson Hole elk, 12
- Shillinger, J. E., 9, 99  
 Disease as a factor in game fluctuation, 99  
 Infectious diseases in wildlife, 9  
See also Bell, W. B., and -----; and McKenney, F. D., and -----.
- Templeton, George S., 74, 85  
 Nail-keg nest box, 74  
 Self-feeding market rabbits, 85
- Uhler, F. M. See Cottam, Clarence, and -----
- Young, Stanley P., 54  
 Rodent control, 54

## Subject Index

- Abstracts of leaflets, 100
- Aids for bird students, 2
- Angora wool rabbit, 55
- Attracting birds, fruits valuable in 10 regions of the U. S., 41-50
- Available publications, Biological Survey, 4
- Badgers, raising, 32
- Bat control, 7
- Bibliographies, relating to--
  - Attracting birds, 8
  - Big game, 95
  - Biological Survey--
    - All available publications, 4
    - Fur-animal publications, 36
  - Bird books, 2, 76
  - Bird magazines, 2
  - Cage bird books and periodicals, 6
  - Cavy periodicals, 56
  - Poisonous snakes, 70
  - Rabbit periodicals, 56
  - Snake venoms, 70
  - U. S. Dept. of Agriculture publications prepared in the Biological Survey--
    - Circulars, 4
    - Farmers' Bulletins, 4
    - Fur and fur-animal publications, 36
    - Leaflets, 4
    - North American Faunas, 4
    - Technical Bulletins, 4
    - Yearbook articles, 4
  - Wildlife diseases, 9
- Big-game preserves--
  - Charles Sheldon Antelope Range, 95
  - Charles Sheldon Antelope Refuge, 95
  - Description, development, and history, 95
  - Desert Game Range, 95
  - Elk Refuge, 95
  - Fort Niobrara Game Preserve, 95
  - Fort Peck Game Range, 95
  - Hart Mountain Antelope Refuge, 95
  - List of those administered by the Biological Survey, 16
  - National Bison Range, 95
  - Nunivak Island Wildlife Refuge, 95
  - Sullys Hill Game Preserve, 61, 95
  - Wichita Mountains Wildlife Refuge, 95
- Birdbanding, information for cooperators, 53
- Bird enemies of--
  - Blueberry insects, 11
  - Cranberry insects, 11
- Bird field study, 76
- Bird refuges, list of those administered by the Biological Survey, 16
- Bird study, publications and other aids, 2, 76
- Birds aid berry growers, 11
- Birds in relation to fishes, 83
- Birds of the Atlantic coast salt marshes, 17
- Blackbirds, control, 96
- Blackbirds in relation to rice on Gulf coast, 96
- Bounties paid by States, 24
- Buffalo herds both on and off Biological Survey refuges, 95
- Cage trap for white-necked ravens, 27
- Care of chameleons, 92
- Caring for squirrels, 80
- Chameleon, habits and care of, 92
- Charles Sheldon Antelope Range, 95
- Charles Sheldon Antelope Refuge, 95
- Check-list of marsh and aquatic plants of the U. S., 72
- College courses in wildlife management, 98
- Combating starling roosts, 81
- Conservation, fur resources, 25
- Control--
  - Bats, 7
  - Blackbirds on Gulf coast, 96
  - Coyotes in Alaska, 62
  - Fish-eating birds, 83
  - Horned larks in California, 64
  - House mice, 78
  - Magpie, 51
  - Meadow mouse, 91
  - Pinon jay, 26
  - Pocket gophers, 91
  - Rabbits, by driving, 59
  - Research in control methods, 91
  - Rodent, aided by Emergency Conservation Work, 54
  - Selective poisons, 91
  - Starling roosts, 81



Control--Continued  
 White-necked raven, 27  
 Wild fowl damage to grain, 13  
 Wolves in Alsaka, 62  
 Controlled hunting areas, Ohio, 93  
 Cooperative research in wildlife management, 38, 87  
 Correlation of laboratory and field methods in economic ornithology, 30  
 Coyote--  
 Control in Alaska, 62  
 Drift studies, 91  
 Cycles in game populations, causes, periods, remedies, 99  
 Dealers--  
 Field glasses, 2  
 Naturalists' supplies, 2  
 Taxidermists' supplies, 2  
 Telescopes, 2  
 Depredations--  
 Coyotes in Alaska, 62  
 Horned larks in California, 64  
 Magpie, 51  
 Pinon jay, 26  
 White-necked raven, 27  
 Wild fowl on grain, 13  
 Wolves in Alaska, 62  
 Desert Game Range, 95  
 Destroying house mice, 78  
 Directories, societies, ornithological, 2  
 Disease--  
 Blackhead, 9  
 Domestic rabbits, vent diseases, 79  
 Eelgrass, 3, 94  
 Factor in game fluctuation, 99  
 Hemorrhagic septicemia, 90  
 In relation to cycles, 99  
 Infectious myxomatosis of domestic rabbits, 89  
 Sanitation in domestic rabbits, 86  
 Tularemia, 5, 9  
 Ulcerative enteritis, 9  
 Wild turkey, 77  
 Wildlife, 9  
 Drinking fountain for minks, 40

Economic ornithology, correlation of laboratory and field methods, 30  
 Education for wildlife administration and research, 98  
 Eelgrass decline, 3, 94  
 Elk, Jackson Hole herd and its needs, 12  
 Elk Refuge, 95  
 Experimental prairie chicken management project, Oklahoma, 39  
 Experimental quail management project, Oklahoma, 39  
 Federal hunting regulations 1935, 18  
 Feed cost, rabbits before weaning, 21  
 Feed requirements, weaned rabbits, 22  
 Feeding pelters, 20  
 Feeding schedule for rabbits, 28  
 Feeding weaned minks, 60  
 Fish-eating birds--  
 Control, 83  
 Food habits, 83  
 Fluctuations in game, 99  
 Food habits--  
 Fish-eating birds, 83  
 Preservation of material for food-habits studies, 29  
 Research, correlation of laboratory and field methods, 30  
 Ruffed grouse, winter food, in New York, 1  
 Scaled quail, 84  
 Forestry and wildlife management, 33, 3  
 Fort Niobrara Game Preserve, 95  
 Fort Peck Game Range, 95  
 Foxes--  
 Classification and price trends of silver fox skins, 58  
 Feed for pelters, 20  
 Polygamous mating, 66  
 Fruits attractive to birds--  
 California, 45  
 Florida, 50  
 Great Basin States, 46  
 Northeastern States, 44  
 Northern Plains States, 43  
 Northwestern States, 41  
 Rocky Mountain States, 42  
 Southeastern States, 49  
 Southern Plains States, 48  
 Southwestern States, 47

Fur animals--

- Foxes, feed for pelts, 20
- Foxes, polygamous mating, 66
- Foxes, silver, classification of skins and price trends, 58
- Minks, automatic drinking fountain, 40
- Minks, feeding weanlings, 60
- Propagation--
  - Badgers, 32
  - Martens, 63
  - Minks, 82
  - Muskrats, 35
  - Otters, 75
  - Raccoons, 34

Fur farming, history and prospects, 69

Fur laws--

- 1935-36, 23
- 1936-37, 68
- 1937-38, 97

Fur resources and their conservation, 25

Game ranges. See Big-game preserves.

Grouse, ruffed, winter food in New York, 1

Guinea pigs, raising, 52

Hart Mountain Antelope Refuge, 95

Hemorrhagic septicemia of domestic rabbits, 90

Horned larks, control in California, 64

House mice, control, 78

Hunting regulations, waterfowl, 1935, 18

Index to leaflets, 100

Infectious diseases in wildlife, 9

Inheritance of "woolly" in rabbits, 73

Instructions for controlling bats, 7

Jackson Hole elk, 12

Jay, pinon, control, 26

Laws--

Bounty, 24

Laws--Continued.

Fur, 1935-36, 23

Fur, 1936-37, 68

Fur, 1937-38, 97

Leaflets, abstracts of, 100

List and index of leaflets 1 to 100, 100

Maggie control, 51

Marking wild animals for identification, 57

Marsh and aquatic plants, 72

Martens, raising, 63

Mink raising, 82

Minks--

Automatic drinking fountain, 40

Feeding weanlings, 60

Muskrats, raising, 35

Myxomatosis of domestic rabbits, 89

Nail-keg nest box, 74

National Bison Range, 95

Nunivak Island Wildlife Refuge, 95

Oklahoma quail and prairie chicken project, 39

Otters, raising, 75

Periodicals on rabbits and cavy, 56

Pheasant refuge-management system, Ohio, 93

Pinon jay, control, 26

Planting, eelgrass, experimental, 94

Planting for wildlife--

Corn belt, 14

Cotton belt, 15

Fruits attractive to birds in 10 regions of the U. S., 41-50

Plants--

Marsh and aquatic, check-list of those of the U. S., 72

Valuable for wildlife utilization and erosion control, 19

Poisoning pinon jays, 26

Poisonous snakes of the U. S., 70

Polygamous mating of foxes, 66

Prairie chicken, lesser--

Life history, Oklahoma, 39

Management project, Oklahoma, 39

Stocking, 39

Preservation of bird stomachs and other food-habit material, 29  
Preserves for big game, 95  
Price trends, silver fox skins, 58  
Protecting crops from horned larks, 64  
Protecting grain crops from wild fowl, 13  
Publications on--  
    Attracting birds, 8  
    Big game, 95  
    Cage birds, 6  
    Fur animals, 36  
    Work of Biological Survey, 4  
Quail--  
    Life history, Oklahoma, 39  
    Management project, Oklahoma, 39  
    Mexican, stocking, 39  
Rabbit drives, 59  
Rabbits, domestic--  
    Angora wool rabbit, 55  
    Average weight at weaning age, 31  
    Feed cost to weaning age, 21  
    Feed requirements in raising weanlings to a weight of 6 pounds, 22  
    Feeding schedule, 28  
    Hemorrhagic septicemia, 90  
    Infectious myxomatosis, 89  
    Inheritance of "woolly", 73  
    Sanitation in rabbitries, 86  
    Self-feeding system, 85  
    Vent diseases, 79  
    Weights of does and young during the suckling period, 65  
Rabbits, wild, control by driving, 59  
Raccoons, raising, 34  
Raising--  
    Badgers, 32  
    Guinea pigs, 52  
    Martens, 63  
    Mink, 82  
    Muskrats, 35  
    Otters, 75  
    Raccoons, 34  
Raven, white-necked, control, 27

Refuges, list of those administered by the Biological Survey, 16  
Regulations, waterfowl hunting, 1935, 18  
Research in control methods, 91  
Rodent control aided by Emergency Conservation Work, 54  
Salt-marsh wildlife, 17  
Sanitation in domestic rabbitries, 86  
Scaled quail, food habits, 84  
Secondary poisoning from thallium, 10  
Self-feeding market rabbits, 85  
Snakes, poisonous, of the U. S., 70  
Squirrels, feeding and caring for, 80  
Sterling, combating roosts, 81  
Status of eelgrass--  
    1935, 3  
    1936, 94  
Sullys Hill Game Preserve, 61, 95  
Thallium--  
    Lethal doses, 10  
    Secondary poisoning from, 10  
Trapping coyotes and wolves in Alaska, 62  
Value of wildlife, 71  
Vent diseases of domestic rabbits, 79  
Waterfowl hunting regulations, 1935, 18  
Waterfowl situation, 1936-37, 88  
Weight of rabbit does and young, 65  
Weight of rabbits at weaning, 31  
White-necked raven, control, 27  
Wichita Mountains Wildlife Refuge, 95  
Wild fowl damage to grain, 13  
Wildlife--  
    In land planning, 71  
    Of Atlantic coast salt marshes, 17  
    Value of, 71  
Wildlife management--  
    Annual increase idea, 39  
    As related to forestry, 33, 37  
    Controlled hunting in Ohio, 93  
    Cooperative research in, 38, 87  
    Education for, 98  
    Free hunting, 39  
    Land planning, wildlife in, 71  
    Marking animals for identification, 57

Wildlife management--Continued.

Plants valuable in producing  
cover, browse, herbage, mast,  
fruit, and seed, 19

Plants valuable in producing  
fruit attractive to birds in  
10 regions of the U. S., 41-50

Prairie chicken, Oklahoma, 39

Quail, Oklahoma, 39

Refuge-management for pheasants  
in Ohio, 93

Stocking--

Lesser prairie chicken, Okla-  
homa, 39

Wildlife management--Continued.

Stocking--Continued.

Pheasants in Ohio, 93

Quail, Oklahoma, 39

Wild turkey in Missouri Ozarks, 77

Wildlife technology, 67

Wild turkey, life history and  
management in Missouri Ozarks,  
77

Winter food, ruffed grouse, New  
York, 1

Wolves, control in Alaska, 62